

# South Africa

Population: **54.8 million**  
GDP Growth: **1.3%**  
GDP/Cap (PPP): **\$13,500**  
Ease of Doing Business: **5**



## ENERGY SECTOR OVERVIEW

According to the Ministry of Energy, South Africa's total domestic electricity generation capacity is 51,309 megawatts (MW) from all sources. Approximately 91.2%, or 46,776 MW, comes from thermal power stations, while 4,533 MW, or 8.8%,\* is generated from renewable energy sources. Conventional thermal power sources will likely be the dominant source of electricity generation for the foreseeable future but its share of total capacity is likely to decrease as more renewable generation comes online in the coming years. South Africa's Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) for utility-scale transactions signed 27 power purchase agreements in June 2018, and plans to add 19,400 MW of new renewable generation by 2030 according to the draft updated Integrated Resource Plan (IRP) released in August 2018.

\*Generation figures derived from the 2018 Draft IRP Released by the South African Department of Energy



### GENERATION CAPACITY

#### Installed Capacity: 51,309 MW

- Thermal: 46,776 MW
- Hydroelectric: 661 MW
- Other Renewables: 3,872 MW

#### Power Africa New MW to Date

- Reached Financial Close: 3,007 MW

**Power Africa 2030 Pipeline: 5,568 MW**



### CONNECTIONS

#### Current Access Rate: 86%

- Rural: 66% Urban: 93%

**Households without Power:**  
2.2 million

**PA New Off-Grid Connections:**  
138,891

## INVESTMENT AND ENABLING ENVIRONMENT

### Biggest Issues and Bottlenecks

1. Macroeconomic forces
2. Outdated Integrated Resource Plan (IRP)
3. Local content requirements

### Power Africa Interventions

1. Transaction advisory support
2. Gas-to-Power advisory
3. Southern Africa Energy Program



## POWER AFRICA'S ENGAGEMENT IN SOUTH AFRICA

### MW GENERATION

Power Africa's interagency partners, the Overseas Private Investment Corporation (OPIC), the U.S. Export-Import Bank, and the U.S. Trade and Development Agency (USTDA), are active in South Africa and have supported variety of solar, wind, biomass, and natural gas projects at utility scale, as well as a selection of distributed generation and commercial & industrial solar transactions.

### CONNECTIONS

Power Africa is supporting the City of Johannesburg with a plan to electrify more than 180 informal housing settlements, using technologies that can be relocated or adapted based on changing needs.

### ENABLING ENVIRONMENT

The Ministry of Energy has drafted an updated IRP which will prescribe the energy mix to address demand to 2050. The new IRP focused on increases in photovoltaic solar panels while reducing coal fired generation and no new civil nuclear power plants. The government has also signed 27 new renewable energy projects under the Renewable Energy Independent Power Producer Procurement Program in 2018 representing 2,130 MW of generation capacity. Power Africa supports the REIPPP through the Southern Africa Energy Program.

### SUCCESS STORY

OPIC provided \$34 million of political risk insurance and \$250 million of financing to support the 60 MW Boschoff Solar Park in the Free State province of South Africa. The transaction is online and providing power to the nation's electric grid.



### ABOUT POWER AFRICA

Power Africa is comprised of 12 U.S. Government Agencies, over 145 private companies, and 18 bilateral and multilateral development partners to support sub-Saharan governments by working together to increase the numbers of people with access to power. Power Africa's goal is to achieve 30,000 MW of new generated power and 60 million new connections by 2030 to reach 300 million Africans.

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